



All About Penguins

Ohio Academic Standards (K-5)

Below is a list of Ohio Academic Standards discussed during the teaching of **All About Penguins**.

SCIENCE

Standard: Life Science

K-2 Benchmark A: Discover that there are living things, non-living things and pretend things, and describe the basic needs of living things.

K.2 Discover that stories (e.g., cartoons, movies, comics) sometimes give plants and animals characteristics they really do not have (e.g., talking flowers).

1.4 Investigate that animals eat plants and/or other animals for food and may also use plants or other animals for shelter and nesting.

K-2 Benchmark B: Explain how organisms function and interact with their physical environment.

K.5 Investigate observable features of plants and animals that help them live in different kinds of places.

1.3 Explore that humans and animals have body parts that help to seek, find and take in food when they are hungry (e.g., sharp teeth, flat teeth, good nose and sharp vision).

2.2 Identify that there are many distinct environments that support different kinds of organisms.

2.3 Explain why organisms can only survive in environments that meet their needs (e.g., organisms that once lived on Earth have disappeared for different reasons such as natural forces or human-caused effects).

2.6 Investigate the different structures of plants and animals that help them live in different environments (e.g., lungs, gills, leaves and roots).

3-5 Benchmark B: Analyze plant and animal structures and functions needed for survival and describe the flow of energy through a system that all organisms use to survive.



- 3.2 Relate animal structures to their specific survival functions (e.g., obtaining food, escaping or hiding from enemies).
- 3.3 Classify animals according to their characteristics (e.g., body coverings and body structure).

K-2 Benchmark C: Describe similarities and difference that exist among individuals of the same kind of plants and animals.

- K.3 Describe how plants and animals usually resemble their parents.
- K.4 Investigate variations that exist among individuals of the same kind of plant or animal.
- 2.4 Compare similarities and differences among individuals of the same kind of plants and animals, including people.

3-5 Benchmark C: Compare changes in an organism's ecosystem/habitat that affect its survival.

- 3.4 Use examples to explain that extinct organisms may resemble organisms that are alive today.
- 3.6 Describe how changes in an organism's habitat are sometimes beneficial and sometimes harmful.
- 5.4 Summarize that organisms can only survive in ecosystems in which their needs are met (e.g., food, water, shelter, air, carrying capacity and waste disposal). The world has different ecosystems and distinct ecosystems support the lives of different types of organisms.
- 5.5 Support how an organism's patterns of behavior are related to the nature of that organism's ecosystem, including the kinds and numbers of other organisms present, availability of food and resources, and the changing physical characteristics of the ecosystem.
- 5.6 Analyze how all organisms, including, humans, cause changes in their ecosystems and how these changes can be beneficial, neutral or detrimental (e.g., beaver ponds, earthworm burrows, grasshoppers eating plants, people planting and cutting trees and people introducing a new species).

Standard: Scientific Inquiry

K-2 Benchmark C: Gather and communicate information from careful observations and simple investigation through a variety of methods.



- K.5 Draw pictures that correctly portray features of the item being described.
- K.8 Measure the lengths of objects using non-standard methods of measurement (e.g., teddy bear counters and pennies).
- 1.7 Make estimates to compare familiar lengths, weights and time intervals.
- 3-5 Benchmark B: Organize and evaluate observation, measurements and other data to formulate inferences and conclusions.
- 3.5 Record and organize observations (e.g., journals, charts and tables).
- 5.2 Evaluate observations and measurements made by other people and identify reasons for discrepancies.

Standard: Scientific Ways of Knowing

K-2 Benchmark B: Recognize the importance of respect for all living things.

- K.3 Interact with living things and the environment in ways that promote respect.
- 3-5 Benchmark C: Explain the importance of keeping records of observations and investigations that are accurate and understandable.
- 3.2 Keep records of investigations and observations and do not change the records that are different from someone else's work.
- 4.2 Record the results and data from an investigation and make a reasonable explanation.
- 4.4 Explain why keeping records of observations and investigations is important.
- 5.5 Keep records of investigations and observations that are understandable weeks or months later.

MATHEMATICS

Standard: Measurement

- K.2 Compare and order objects of different lengths, areas, weights and capacities; and use relative terms such as longer, shorter, bigger, smaller, heavier, light, more and less.



- 2.2 Establish personal or common referent units of measure to make estimates and comparisons (e.g., the width of a finger is a centimeter, a large bottle of soda pop is 2 liters, a small paperclip weighs about one gram).
- 3.2 Establish personal or common referents to include additional units (e.g., a gallon of milk, a postage stamp is about a square inch).

Standard: Data Analysis and Probability

- 1.2 Collect and organize data into charts using tally marks.

SOCIAL STUDIES

Standard: Geography

K-2 Benchmark A: Identify the location of the state of Ohio, the United States, the continents and oceans on maps, globes and other geographic representations.

- 2.3 Name and locate the continents and oceans.

3-5 Benchmark A: Use map elements or coordinates to locate physical and human features of North America.

- 3.5 Identify the location of the Equator, Arctic Circle, Antarctic Circle, North Pole, South Pole, Prime Meridian, the tropics and the hemispheres on maps and globes.

- 4.3 Describe the location of Ohio relative to other states and countries.

Standard: Citizenship Rights and Responsibilities

3-5 Benchmark A: Explain how citizens take part in civic life in order to promote the common good.

- 3.1 Describe how people help to make the community a better place in which to live including:
- Working to preserve the environment;
 - Helping the homeless;
 - Restoring houses in low-income areas;
 - Supporting education;
 - Planning community events;
 - Starting a business.